New Jersey Department of Transportation

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Baseline Document Change Announcement

Materials Transfer Vehicle (MTV)

BDC02S-11

April 16, 2003

Subject: Revision to Subsection 404.07 of the 2001 Standard Specifications both English and Metric units

Subsection 404.07 of the 2001Standard Specifications has been revised to require the contractor to obtain the Department's permission if the fully or partially loaded MTV is expected to traverse on structures during construction. Additionally, the Standard Inputs have been revised to incorporate a criteria to determine the use of an MTV and which pavement courses can be constructed using it on a given project.

These revisions are incorporated into the Standard Specifications and Standard Inputs via Standard Inputs SI2001E1 and SI2001M1 dated April 16, 2003.

The changes to SI2001E1 are as follows:

404.07 Materials Transfer Vehicle (MTV)THE ENTIRE SUBSECTION IS CHANGED TO:

The MTV shall independently deliver mixtures from the hauling equipment to the paving equipment. A paver hopper insert with a minimum capacity of 14 tons shall be installed in the hopper of conventional paving equipment when an MTV is used.

As a minimum, the MTV shall have a high capacity truck unloading system which will receive mixtures from the hauling equipment; a storage system in the MTV with a minimum capacity of 15 tons of mixture; and a discharge conveyor, with the ability to swivel, to deliver the mixture to the paving spreader while allowing the MTV to operate from an adjacent lane. In addition, the paving operation must contain a remixing system to continuously blend the mixture prior to placement. The remixing may be done by the MTV or in the paver hopper.

Use of MTV may not be necessary on all projects. Refer to the Special Provisions to determine if its use is either mandatory or optional. If an MTV is to be used on the Project the Contractor shall further investigate the possible movement of the fully or partially loaded MTV on the Project. If there are any structures on the Project that the fully or partially loaded MTV will traverse, the Contractor shall request an Overweight Permit Check from the Structural Evaluation Unit. Such request, including the axle configuration and weights, and the Project limits, shall be made in writing in a fax to (609) 530-4444 and operations shall not be started until this permission is received from the Department.

SURFACE AND INTERMEDIATE COURSES

THE DESIGNER SHALL SPECIFY THE USE OF A MATERIALS TRANSFER VEHICLE (MTV) FOR SURFACE AND INTERMEDIATE COURSES WHEN THE FOLLOWING CONDITIONS ARE SATISFIED:

1. THE LENGTH OF CONTINUOUS THROUGH TRAVEL LANE CONSTRUCTION IS MORE THAN 5,000 FEET.

- 2. THERE ARE NO OVERHEAD OBSTRUCTIONS WITHIN 12 FEET ABOVE THE PAVEMENT SURFACE THAT WOULD PREVENT PASSAGE OF THE MTV.
- 3. THE LANE WIDTHS ARE GREATER THAN 11 FEET.
- 4. THERE ARE NO PRECLUDED STRUCTURES OR THERE IS A MINIMUM OF 5,000 FEET BETWEEN PRECLUDED STRUCTURES.

BASE COURSE

WHEN THE USE OF AN MTV HAS BEEN SPECIFIED FOR THE SURFACE AND INTERMEDIATE COURSES, THE DESIGNER SHALL SPECIFY THE USE OF A MTV FOR THE BASE COURSE WHEN THE FOLLOWING CONDITIONS ARE SATISFIED:

- 1. STAGING OF BASE COURSE CONSTRUCTION WILL NOT PRECLUDE THE PAVING OF CONTINUOUS LENGTHS OF MORE THAN 2,500 FEET OF BASE.
- 2. THE NOMINAL MAXIMUM AGGREGATE SIZE OF THE BASE COURSE IS EITHER 25 MM OR 37.5 MM.
- 3. THE SUBGRADE/BASE CONDITIONS WILL BE ADEQUATE TO SUPPORT THE LOADED MTV (APPROXIMATELY 122,000 POUNDS IN A TWO AXLE CONFIGURATION).

SELECT ONE OF THE FOLLOWING

WHEN USED FOR CONSTRUCTION OF SUPERPAVE HMA PAVEMENT, THE APPROPRIATE PAY ITEM DESCRIPTON SHALL BE STATED. FOR EXAMPLE, HOT MIX ASPHALT SURFACE COURSE SHALL BE CHANGED TO SUPERPAVE HOT MIX ASPHALT _ _ SURFACE COURSE.

A materials transfer vehicle (MTV) is required for the construction of the pavement surface course in the Traveled Way. Separate payment will not be made for the MTV. All costs thereof shall be included in the prices bid for Hot Mix Asphalt Surface Course.



A materials transfer vehicle (MTV) is required for the construction of the pavement surface course and intermediate course in the Traveled Way. Separate payment will not be made for the MTV. All costs thereof shall be included in the prices bid for Hot Mix Asphalt Surface Course and Hot Mix Asphalt Intermediate Course.



A materials transfer vehicle (MTV) is required for the construction of all pavement courses in the Traveled Way. Separate payment will not be made for the MTV. All costs thereof shall be included in the prices bid for Hot Mix Asphalt Surface Course, Hot Mix Asphalt Intermediate Course and Hot Mix Asphalt Base Course.



A materials transfer vehicle (MTV) is optional for the construction of the pavement.

The changes to SI2001M1 are as follows:

404.07 Materials Transfer Vehicle (MTV) THE ENTIRE SUBSECTION IS CHANGED TO:

The MTV shall independently deliver mixtures from the hauling equipment to the paving equipment. A paver hopper insert with a minimum capacity of 12.7 megagrams shall be installed in the hopper of conventional paving equipment when an MTV is used.

As a minimum, the MTV shall have a high capacity truck unloading system which will receive mixtures from the hauling equipment; a storage system in the MTV with a minimum capacity of 13.6 megagrams of mixture; and a

discharge conveyor, with the ability to swivel, to deliver the mixture to the paving spreader while allowing the MTV to operate from an adjacent lane. In addition, the paving operation must contain a remixing system to continuously blend the mixture prior to placement. The remixing may be done by the MTV or in the paver hopper.

Use of MTV may not be necessary on all projects. Refer to the Special Provisions to determine if its use is either mandatory or optional. If an MTV is to be used on the Project the Contractor shall further investigate the possible movement of the fully or partially loaded MTV on the Project. If there are any structures on the Project that the fully or partially loaded MTV will traverse, the Contractor shall request an Overweight Permit Check from the Structural Evaluation Unit. Such request, including the axle configuration and weights, and the Project limits, shall be made in writing in a fax to (609) 530-4444 and operations shall not be started until this permission is received from the Department.

SURFACE AND INTERMEDIATE COURSES

THE DESIGNER SHALL SPECIFY THE USE OF A MATERIALS TRANSFER VEHICLE (MTV) FOR SURFACE AND INTERMEDIATE COURSES WHEN THE FOLLOWING CONDITIONS ARE SATISFIED:

- 1. THE LENGTH OF CONTINUOUS THROUGH TRAVEL LANE CONSTRUCTION IS MORE THAN 1525 METERS.
- 2. THERE ARE NO OVERHEAD OBSTRUCTIONS WITHIN 3.7 METERS ABOVE THE PAVEMENT SURFACE THAT WOULD PREVENT PASSAGE OF THE MTV.
- 3. THE LANE WIDTHS ARE GREATER THAN 3.5 METERS.
- 4. THERE ARE NO PRECLUDED STRUCTURES OR THERE IS A MINIMUM OF 1525 METERS BETWEEN PRECLUDED STRUCTURES.

BASE COURSE

WHEN THE USE OF AN MTV HAS BEEN SPECIFIED FOR THE SURFACE AND INTERMEDIATE COURSES, THE DESIGNER SHALL SPECIFY THE USE OF A MTV FOR THE BASE COURSE WHEN THE FOLLOWING CONDITIONS ARE SATISFIED:

- 1. STAGING OF BASE COURSE CONSTRUCTION WILL NOT PRECLUDE THE PAVING OF CONTINUOUS LENGTHS OF MORE THAN 760 METERS OF BASE.
- THE NOMINAL MAXIMUM AGGREGATE SIZE OF THE BASE COURSE IS EITHER 25 MM OR 37.5 MM.
- 3. THE SUBGRADE/BASE CONDITIONS WILL BE ADEQUATE TO SUPPORT THE LOADED MTV (APPROXIMATELY 55.3 MEGAGRAMS IN A TWO AXLE CONFIGURATION).

SELECT ONE OF THE FOLLOWING

WHEN USED FOR CONSTRUCTION OF SUPERPAVE HMA PAVEMENT, THE APPROPRIATE PAY ITEM DESCRIPTON SHALL BE STATED. FOR EXAMPLE, HOT MIX ASPHALT SURFACE COURSE SHALL BE CHANGED TO SUPERPAVE HOT MIX ASPHALT _ _ SURFACE COURSE.

A materials transfer vehicle (MTV) is required for the construction of the pavement surface course in the Traveled Way. Separate payment will not be made for the MTV. All costs thereof shall be included in the prices bid for Hot Mix Asphalt Surface Course.

******OR******

A materials transfer vehicle (MTV) is required for the construction of the pavement surface course and intermediate course in the Traveled Way. Separate payment will not be made for the MTV. All costs thereof shall be included in the prices bid for Hot Mix Asphalt Surface Course and Hot Mix Asphalt Intermediate Course.

******OR******

A materials transfer vehicle (MTV) is required for the construction of all pavement courses in the Traveled Way. Separate payment will not be made for the MTV. All costs thereof shall be included in the prices bid for Hot Mix Asphalt Surface Course, Hot Mix Asphalt Intermediate Course and Hot Mix Asphalt Base Course.

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A materials transfer vehicle (MTV) is optional for the construction of the pavement.

Instructions to Designers

This revision shall be for all projects requiring construction of HMA or Superpave HMA pavement and are to be advertised after May 1st, 2003

This revision has been incorporated in SI2001E1 and SI2001M1 dated April 16, 2003 and will be included in future updates.

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